

Claims

What is claimed is:

- 1 1. A method of mobile multimedia terminal interactivity, comprising the steps
2 of:
3 requesting information from a digital service provider;
4 receiving a data signal from said digital service provider over the air;
5 decoding said data signal for presentation;
6 optimizing said data signal for output; and
7 presenting said optimized signal as output.
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1 6. The method of Claim 1, wherein said optimizing step further comprises the
2 step of combining said data signal with other data to create a
3 display.

1 7. The method of Claim 1, wherein said data signal is received from a digital
2 broadcast channel.

1 8. The method of Claim 1, wherein said data signal is display data for a mobile
2 station.

9. The method of Claim 1, wherein said data signal is in DVB-T format.

10. The method of Claim 1, wherein said data signal is in MP3 format.

11. The method of Claim 1, wherein said presenting step uses a video display.

1 12. The method of Claim 1, wherein said presenting step uses an audio output.

1 13. A mobile multimedia terminal, comprising:
2 At least one receiver connected to receive over the air data signals;
3 a controller connected to said receiver to manage and coordinate the
4 functions of said receiver;
5 a display interface connected to said media decoder to optimize said
6 received over the air data signals for display; and
7 a low power radio frequency transceiver connected to said controller to
8 provide an interactive environment with respect to said
9 received over the air data signals.

10 14. The mobile multimedia terminal of Claim 13, further comprising a media
11 decoder connected to said receiver and said controller to decode
12 said received over the air data signals.

13 15. The mobile multimedia terminal of Claim 13, wherein said controller
14 switches the operation of said receiver on and off according to the
15 communications environment.

16 16. The mobile multimedia terminal of Claim 13, further comprising a timing
17 and synchronization connected to said controller and said receiver.

18 17. The mobile multimedia terminal of Claim 13, further comprising a timing
19 and synchronization connected to said controller and said receiver
20 wherein said timing and synchronization manager enables
21 reception of said over the air data signals without resynchronizing
22 said receiver.

1 18.The mobile multimedia terminal of Claim 13, further comprising a display
2 connected to said display interface to display video data.

1 19.The mobile multimedia terminal of Claim 13, further comprising an audio
2 output to present audio data.

1 20.The mobile multimedia terminal of Claim 13, further comprising memory
2 connected to said controller to store said received over the air data
3 signals.

1 21.The mobile multimedia terminal of Claim 13, wherein said over the air data
2 signal is display data for a mobile station.

1 22.The mobile multimedia terminal of Claim 13, further comprising a wireless
2 local area network transceiver connected to said controller to
3 provide interactivity with said received over the air data signals.

1 23.The mobile multimedia terminal of Claim 13, further comprising a mobile
2 station transceiver connected to said controller to provide
3 interactivity with said received over the air data signals.

1 24.The mobile multimedia terminal of Claim 13, further comprising a mobile
2 station transceiver connected to said controller to provide
3 interactivity with said received over the air data signals.

25. The mobile multimedia terminal of Claim 13, further comprising a mobile station transceiver and a wireless local area network transceiver connected to said controller wherein said controller selects one of said transceivers to provide interactivity with said received over the air data signals according to the communications environment.

26. The mobile multimedia terminal of Claim 13, wherein at least one of said receivers is a DVB-T receiver.

[illegible]

1 27. An interactive mobile multimedia terminal system, comprising:
2 a mobile station which communicates data requests;
3 a service provider which receives said data requests and provides data
4 according to said requests;
5 a broadcast operator which receives said data from said service provider
6 and transmits said data over a broadcast channel; and
7 a mobile multimedia terminal which includes,
8 at least one receiver which receives said data;
9 a media decoder connected to said receiver to decode said received
10 data;
11 a controller connected to said receiver and said media decoder to
12 manage and coordinated the functions of said receiver
13 and said media decoder;
14 a display interface connected to said media decoder to optimize
15 said received data for display; and
16 a low power radio frequency transceiver connected to said
17 controller to provide interactivity with said received
18 data and a communications link to said mobile station.

1 28. The interactive mobile multimedia terminal system of Claim 27, wherein
2 said controller switches the operation of said receiver on and off
3 according to the communications environment.

1 29. The interactive mobile multimedia terminal system of Claim 27, further
2 comprising a timing and synchronization connected to said
3 controller and said receiver.

1 30.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising a timing and synchronization connected to said
3 controller and said receiver wherein said timing and
4 synchronization manager enables reception of said over the air
5 data signals without resynchronizing said receiver.

1 31.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising a mobile station transceiver and a wireless local area
3 network transceiver connected to said controller wherein said
4 controller selects one of said transceivers to provide interactivity
5 with said received over the air data signals according to the
6 communications environment.

1 32.The interactive mobile multimedia terminal system of Claim 27, wherein at
2 least one of said receivers is a DVB-T receiver.

1 33.The interactive mobile multimedia terminal system of Claim 27, wherein
2 said over the air data signal is display data for said mobile station.

1 34.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising a media decoder connected to said receiver and said
3 controller to decode said received over the air data signals.

1 35.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising a display connected to said display interface to display
3 video data;.

1 36.The interactive mobile multimedia terminal system of Claim 27, further a
2 media decoder connected to said receiver and said controller to
3 decode said received over the air data signals.

1 37.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising audio output to present audio data.

1 38.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising memory connected to said controller to store said
3 received over the air data signals.

1 39.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising a wireless local area network transceiver connected to
3 said controller to provide interactivity with said received over the
4 air data signals.

1 40.The interactive mobile multimedia terminal system of Claim 27, further
2 comprising a mobile station transceiver connected to said
3 controller to provide interactivity with said received over the air
4 data signals.

1 41.The interactive mobile multimedia terminal system of Claim 27, wherein
2 said mobile station includes a low-power radio frequency
3 transceiver for receiving data from said mobile multimedia
4 terminal.

1 42.The interactive mobile multimedia terminal system of Claim 27, wherein
2 said mobile multimedia terminal transmits data requests to said
3 mobile station.

1 43.The interactive mobile multimedia terminal system of Claim 27, wherein
2 said mobile multimedia terminal transmits data requests to said
3 mobile station using said low-power radio frequency transceiver.

1 44.The interactive mobile multimedia terminal system of Claim 27, wherein
2 said mobile station is integrated into said mobile multimedia
3 terminal.